

WHAT IS CLAIMED IS:

1. In a network, a Bluetooth network access point comprising:
a first transceiver, wherein the first transceiver handles traffic; and
at least one auxiliary transceiver, wherein the at least one auxiliary
transceiver controls the operations associated with page scan and/or inquiry scan.

2. The Bluetooth network access point of claim 1, wherein two
auxiliary transceivers are used, the first auxiliary transceiver scans for inquiry
messages which are used to discover neighboring nodes and the second auxiliary
transceiver scans for page messages from neighboring nodes.

3. The Bluetooth network access point of claim 1, wherein the first
and auxiliary transceivers communicate with nodes using a frequency hopping
communication scheme.

4. The Bluetooth network access point of claim 1, wherein the first
and auxiliary transceivers are arranged such that the first and auxiliary
transceivers appear to nodes communicating with them as a single network access
point.

5. The Bluetooth network access point of claim 2, wherein the first
auxiliary transceiver responds to inquiry messages using inquiry response
messages, and

wherein the second auxiliary transceiver establishes a connection with
neighbor nodes.

7. The Bluetooth network access point of claim 1, wherein the network access point is connected to a fixed infrastructure network.

9. The Bluetooth network access point of claim 1, wherein the first transceiver and at least one auxiliary transceiver are synchronized by the same clock.

scanning for inquiry messages by a first transceiver of the network access point;

11. The method of claim 10, further comprising the steps of:

receiving a page message from the neighbor node by the first transceiver;
and

responding to the page message by the first transceiver, wherein the node initially establishes the connection with the first transceiver of the network access point.

12. The method of claim 10, further comprising the steps of:

receiving a page message from the neighbor node by a third transceiver of the network access point; and

responding to the page message by the third transceiver, wherein the node initially establishes the connection with the third transceiver of the network access point.

13. The method of claim 10, wherein the network access point and the node communicate using a frequency hopping scheme.

14. The method of claim 13, wherein the network access point and the node communicate in accordance with Bluetooth protocol.

15. The method of claim 10, wherein the network access point is connected to a fixed infrastructure network.

16. A method for establishing a traffic channel between a Bluetooth network access point and a node, comprising the steps of:

scanning for inquiry messages by a first transceiver;

receiving an inquiry message by the first transceiver from the node;

establishing a connection with the node by performing page scans by a second transceiver; and

transferring the established connection to a third transceiver for communicating traffic.

17. The method of claim 16, wherein the first, second and third transceivers have the same Bluetooth device address (BD_ADDR).

18. The method of claim 16, wherein the first, second and third transceivers are synchronized by the same clock.

19. The method of claim 16, wherein at least one additional transceiver is used to aid the first and/or second transceiver.

20. The method of claim 16, wherein the Bluetooth network access point is connected to a fixed infrastructure.